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Colin N.B. Cook

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07/17/2008

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EXAMINER

HOANG, HIEU T

ART UNIT

PAPER NUMBER

2152

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/792,285	<b>Applicant(s)</b> COOK ET AL.	
	<b>Examiner</b> HIEU T. HOANG	<b>Art Unit</b> 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6,8,9 and 12-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4, 6, 8, 9, 12-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

1. This office action is in response to the communication filed on 05/12/2008.
2. Claims 13-25 are new.
3. Claims 3, 5, 7, 10 and 11 are cancelled.
4. Claims 1-2, 4, 6, 8, 9, 12-25 are pending.

### ***Response to Amendment***

5. The objection of claim 5 has been withdrawn due to cancellation of the claim.
6. The 35 U.S.C. 112 rejection of claims 1 has been withdrawn due to the amendment.

### ***Response to Arguments***

7. Applicant's arguments have been fully considered but are moot in view of new ground(s) of rejection.

### ***Claim Objections***

8. Claim 21 is objected to because of the following informalities: the claim recites "the VPS". There is no antecedent basis for the element in the claim. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

Art Unit: 2152

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. The specification is objected to under 35 U.S.C. 112, first paragraph, as failing to adequately teach how to make or use the invention. Applicant's disclosure is insufficient to allow one of ordinary skilled in the art to make or use the invention without undue experimentation because applicant did not adequately disclose the necessary steps to perform the method (such as in claim 8). See *In re Gunn*, 190 USPQ 402 (CCPA 1976.) The specification fails to disclose "a face plate facing outside of the host computer casing," "host connector port," "network port," "physical bus slot location," "video port" as recited in claim 1. **Note** that these are merely exemplary and do not include all elements that lack support from the specification. Applicant is required to find and fix similar erroneous elements. Same rationale applies to claims 8 and 18.

11. Claims 1-2, 4, 6, 8, 9, 12-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The examiner cannot find any disclosure in the specification regarding "a face plate facing outside of the host computer casing," "host connector port," "network port," "physical bus slot location," "video port" as recited in claim 1.

Art Unit: 2152

12. Claims 18-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement for the same rationale as above. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Furthermore, the examiner cannot find any disclosure in the specification regarding a virtual presence server using **only power and video data from the host computer bus, and a cable with just mouse and keyboard connectors connecting to keyboard and mouse ports on the host** as recited in the first two limitations of claim 18.

13. It is suggested that applicant could overcome the U.S.C. 112 first paragraph rejection by providing a suitably detailed system diagram (with appropriate cross-indexing in the detailed description to reference numerals on said system diagrams.) No new matter should be added.

### ***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 1-2, 6, 8, 9, 12-19 and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hermanson et al. (US 6,983,340, hereafter Hermanson), in view of Leigh et al. (US 2003/0088655, hereafter Leigh).

16. For claim 1, Hermanson discloses a virtual presence architecture (VPA) between a host computer contained within a host computer casing and a remote computer, the host computer having a processor producing video data in response to input signals and delivering the video data onto a host computer bus having associated physical bus slot locations, comprising:

a virtual presence server installed inside said host computer with a face plate facing outside of the host computer casing and having a host connector port and a network port, the virtual presence server being physically connected to the host computer only at one associated physical bus slot location and being electrically connected to the host computer bus to receive only power from the host computer bus; and utilizing electronically only said host computer's power source (claim 1, fig. 3, col. 3, a card connected to an expansion slot on a host, the card only using power from the host); and

a multiple-terminated cable having a first cable end to physically connect to the connector port and having at a distal end separated video, keyboard, and mouse connectors to connect to, respectively, video, keyboard and mouse ports on the host computer casing for transmission of keyboard and mouse information to the host computer on, respectively, the keyboard and mouse ports, and

Art Unit: 2152

reception of the video data from the host computer on the video port (claim 1, fig. 3, col. 3, a cable that loops back host KVM signals to inputs into the card);

a virtual presence client communicating with said host computer through said virtual presence server to provide a virtual presence on said remote computer (fig. 3, a remote computer that controls the host using the card and connected cable), the virtual presence client communicating the keyboard and mouse information via, in order: a port (fig. 3, port connected to link 112 to remote KVM receiver, transmitter), the virtual presence server, the first cable end, the multiple-terminated cable, the keyboard and mouse connectors, and the keyboard and mouse ports to the host computer, and receiving the video data from the host computer via, in order: the video port, the multiple terminated cable, the video connector, the virtual presence server, the port to the virtual presence client (fig. 3, col. 3, a KVM card transfers KVM signals to/from the host and combine signals into one output to send out to a remote receiver/transmitter).

However, Hermanson does not disclose a network, and a network port in configuration;

However, Leigh discloses that KVM signals can be transmitted and received via a network (fig. 1)

It would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Hermanson and Leigh to apply KVM card structure of Hermanson to a network environment of Leigh to send/receive KVM signals over a long distance.

17. For claim 18, XX discloses a virtual presence architecture (VPA) between a host computer contained within a host computer casing and a remote computer, the host computer having a processor producing video data in response to input signals and delivering the video data onto a host computer bus having associated physical bus slot locations, comprising:

- a virtual presence server installed inside said host computer with a face plate facing outside of the host computer casing and having a host connector port and a network port, the virtual presence server (VPS) being physically connected to the host computer only at one associated physical bus slot location and being electrically connected to the host computer to receive only power from the host computer bus (claim 1, fig. 3, col. 3, a card connected to an expansion slot on a host, the card only using power from the host);

- a multiple-terminated cable having a first cable end to physically connect to the connector port and having at a distal end separated keyboard and mouse connectors to connect to, respectively, keyboard and mouse ports on the host computer casing for transmission of keyboard and mouse information to the host computer on, respectively, the keyboard and mouse ports (claim 1, fig. 3, col. 3, a cable that loops back host keyboard and mouse signals to inputs to the card);

- a virtual presence client communicating with said host computer through said virtual presence server to provide a virtual presence on said remote computer (fig. 3, a remote computer that controls the host using the card and connected cable), the virtual presence client communicating the keyboard and



Art Unit: 2152

mouse information via, in order: a port (fig. 3, port connected to link 112 to remote KVM receiver, transmitter), the virtual presence server, the first cable end, the multiple-terminated cable, the keyboard and mouse connectors, and the keyboard and mouse ports to the host computer, and receiving the video data from the host computer via, in order: the video port, the multiple terminated cable, the video connector, the virtual presence server, the port to the virtual presence client, whereby the virtual presence server does not send any instructions to the processor of the host computer via the host computer bus (fig. 3, col. 3, claim 1, a KVM card transfers KVM signals to/from the host, not through bus communications and therefore not requiring CPU processing, and combine signals into one output to send out to a remote receiver/transmitter).

Hermanson does not disclose the virtual presence server (VPS) receives the video data from the host computer bus; and a network, and a network port in configuration;

However, Leigh discloses:

the virtual presence server (VPS) receives the video data from the host computer bus (fig. 5, [0036], KVM card provides video snooping from host bus)

KVM signals can be transmitted and received via a network (fig. 1)

It would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Hermanson and Leigh to apply KVM card structure of Hermanson to a network environment of Leigh to send/receive KVM signals over a long distance.

Art Unit: 2152

18. For claim 2, Hermanson-Leigh further discloses said virtual presence server is a PCI card installed in a PCI slot of said host computer (Hermanson, col. 3 line 16, Leigh, [0051] lines 20-26, PCI KVM card).

19. For claim 6, Hermanson-Leigh further discloses said virtual presence server does not interfere with the processing of said host CPU ([0036], [0037], outgoing snooping is done by the card, no host CPU processing required, incoming processing (signal translation) is done by the card logic and is transferred to appropriate device via PCI bus).

20. For claim 8, the claim is rejected for the same rationale as in claim 1.

21. Claim 9 is rejected for the same rationale as in claim 2.

22. For claim 12, Hermanson-Leigh further discloses the VPC is implemented entirely in software installed on said remote computer (abstract, [0067], Java enabled web page to remote control the host by KVM).

23. For claim 13, Hermanson-Leigh further discloses the VPS includes video logic to capture the video from the video connector and a video encoder to encode the captured video, and the VPC includes a video decoder to decode the video encoded by the VPS

Art Unit: 2152

24. For claim 14, Hermanson-Leigh further discloses the VPS does not send instructions to or receive instructions from the host computer bus (Hermanson, claim 1, KVM card only uses power from the host).

25. For claim 15, Hermanson-Leigh further discloses the VPS does not affect any functioning of the host computer processor (Hermanson, claim 1, KVM card only uses power from the host).

26. For claim 16, Hermanson-Leigh further discloses the VPS does not require any drivers on the host (Hermanson, claim 1, KVM card only uses power from the host).

27. For claim 17, Hermanson-Leigh further discloses the VPS operates without altering software and hardware on the host computer (Hermanson, claim 1, KVM card only uses power from the host).

28. Claim 19 is rejected for the same rationale as in claim 2.

29. Claims 22-25 are rejected for the same rationale as in claims 14-17 respectively.

30. For claim 21, Hermanson-Leigh further discloses the VPS includes video logic to capture the video from the video connector and a video encoder to encode the captured video, and the VPC includes a video decoder to decode the video encoded by the VPS (Leigh, fig. 5, MUX or multiplexing KVM signal and de-multiplexing at remote computer)

Art Unit: 2152

31. Claims 4 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hermanson-Leigh in view of Zansky et al. (US 6,947,287, hereafter Zansky).

32. For claim 4, Hermanson-Leigh discloses the invention as in claim 1. Hermanson-Leigh does not disclose said virtual presence server (or PCI card) includes an external power connection so that it can monitor the power status of said host.

However, Zansky discloses a PCI card includes an external power connection so that it can monitor the power status of said host (fig. 4, col. 4 lines 16-41, a PCI card for monitoring power level of a power supply with external connection for remote monitoring)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Hermanson-Leigh and Zansky to add other features such as power level monitoring to the PCI KVM card of Hermanson-Leigh.

33. Claim 20 is rejected for the same rationale as in claim 4.

### ***Conclusion***

34. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.**

Art Unit: 2152

See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

35. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hieu T. Hoang whose telephone number is 571-270-1253. The examiner can normally be reached on Monday-Thursday, 8 a.m.-5 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2152

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HH

/Bunjob Jaroenchonwanit/

Supervisory Patent Examiner, Art Unit 2152